## INFANTRY NEWS



THE SOLDIER ENHANCEMENT Program (SEP) invites soldiers to submit common-sense ideas for improving their lethality, mobility, and survivability on the battlefield. The purpose of SEP is to accelerate the acquisition of lighter, more lethal weapons and improved "soldier items of equipment," and to get that new equipment in the hands of soldiers in three years or less.

The Army has allocated funds each vear to purchase, test, and type-classify off-the-shelf equipment based on recommendations from soldiers and commanders in the field. Funds are then budgeted to purchase and field those non-developmental items of equipment that pass rigorous technical and operational testing. Some items are typeclassified, placed in Common Tables of Allowance publications or General Services Administration (GSA) catalogs and can be purchased by the unit commander for his soldiers using his operational funds. Other items may be fielded at no cost to the unit.

Since its inception in 1990, SEP has approved 139 projects and completed 49 of them, fielding such items as combat ration improvements, a flameless ration heater, intermediate cold/wet gloves, penlights/flashlights, the M249 assault pack, sniper optics, desert BDUs (battle dress uniforms), desert boots, the mattax, laser/ballistic eye protection, a soldier ground insulator, common rail mounts, an AT4 night sight bracket, the laser target pointer, intermediate cold/wet boots, an individual tactical load-bearing vest, the extended cold/wet boots, and many others.

When ideas are received, they are screened to ensure that they meet the minimum criteria for an SEP proposal. SEP candidates are then forwarded to the Army Materiel Command (AMC) for a technical risk assessment. Propo-

nent schools of the Training and Doctrine Command (TRADOC) then evaluate them to determine whether an operational need or requirement exists. Ideas that meet the criteria, are low to moderate technical risk, and solve a battlefield deficiency or need, are then placed in priority for funding as "new starts" for the next fiscal year.

The Army will soon begin accepting new start candidates for the Fiscal Year 1997 program. SEP candidates must meet the following criteria: must be a soldier system item (an item of equipment worn, carried, or consumed by the soldier for his or her individual use in a tactical environment); must be commercially available (off-the-shelf with little or no modification for field military use); and must satisfy an operational need or battlefield deficiency. If it makes the soldier more effective or efficient on the battlefield, reduces his load (in either weight or bulk), enhances lethality, survivability, command and control, sustainment, mobility, safety, training, or quality of life, or if soldiers are spending their own money to buy it, then it may well be a strong SEP candidate.

The SEP is not an incentive award program. No monetary awards will be given for proposals that are adopted for use and result in a cost saving to the government.

Anyone who would like to submit a Soldier Enhancement Program proposal may obtain a submission form by contacting the TRADOC System Manager-Soldier, ATTN: ATZB-TS, Fort Benning, GA 31905-5000; telephone commercial (706) 545-1189/6047, DSN 835-1189/6047, FAX 835-1377.

A WEAPON TO REPLACE the M72 light antitank weapon (LAW) and

the M136 (AT4) is being developed in a joint effort between the U.S. Marine Corps and the U.S. Army Infantry School's Directorate of Combat Developments.

The Multipurpose Individual Munition (MPIM)/Short Range Assault Weapon (SRAW) is a true multipurpose weapon system specifically designed for today's light infantrymen. It will enable both soldiers and marines to defeat a broad spectrum of targets on the modern battlefield.

The MPIM/SRAW is a lightweight man-portable system capable of destroying or disabling targets with direct fire. Through the use of follow-through technology, the missile is capable of introducing a grenade about three-fourths the size of the standard hand grenade into an opening created by the initial penetrating blast. This ability enables the weapon to destroy or disable a target by killing or incapacitating enemy personnel inside or behind enclosures such as bunkers or buildings.

A fire-and-forget missile, the weapon's internal guidance, which is built into the missile itself, eliminates the need for wires, extensive tracking, and lead time for moving targets. The built-in guidance capability also gives the infantry soldier a higher probability of a first-round hit, given a single shot, and the dual functioning warhead ensures high lethality and destructive effects against personnel and other targets.

The MPIM/SRAW is 35 inches long and will weigh less than 20 pounds. This is shorter and about six pounds heavier than the AT4, but it is more versatile and tailored to the infantry. The weapon system was developed to meet the needs of the individual soldier, with heavy consideration for urban opera-

tions, deliberate defense, and defense against light armored vehicles. Current night vision sight technology is compatible and effective out to a range of at least 300 meters.

The system has a soft launch capability that enables the gunner to fire the weapon safely from within enclosures and from the prone position without concern for the injuries normally associated with backblast. This soft launch increases the soldier's survivability by reducing the launch signature and by allowing him to take full advantage of available cover and concealment.

The MPIM-SRAW will be procured as a round of ammunition and will be issued on the basis of METT-T (mission, enemy, terrain, troops, and time). Initial unit densities will closely parallel those of the AT4. Training, also expected to be similar to that for the AT4, will be easier because of the elimination of lead compensation for moving targets.

The development of the weapon is unique in that the Army Missile Command at Redstone Arsenal is developing the warhead, and the U.S. Marine Corps is developing the missile. The integration of the two will begin in Fiscal Year 1996, and fielding is scheduled to begin in Fiscal Year 2001.

Meanwhile, the Infantry School is looking for a new name for the

MPIM/SRAW—a weapon that significantly improves the infantryman's ability to close with and destroy the enemy. (The Marine Corps version is called "Predator.")

If you have a suggestion for a name or would like to see a video of the MPIM/SRAW in action, write to Commandant, U.S. Army Infantry School, ATTN: ATSH-CDF, Fort Benning, GA 31905-5400.

THE M2HB .50 CALIBER machineguns now in units may have two different kinds of barrels—lined and unlined—and the difference can be important.

The .50 caliber machinegun (NSN 1005-00-322-9715) has been in the inventory for many years and continues to be the Army's primary heavy machinegun, partly because of upgrades and improvements made over the years. One such improvement is the lined barrel (NSN 1005-00-726-6131, part number 7266131). Manufacturers install liners, using Stellite 21 (MIL-C-13358), as an effective means of moderating barrel erosion. The liner is hardened to resist abrasion, has good thermal properties to resist heat, and is chemically inert to retain its original physical properties. This improvement makes the lined barrel more durable than the unlined barrel.

Although the unlined barrel (NSN 1005-00-652-8269, part number 6528269) is no longer in production, it may still exist in some units. This barrel is fully operational and will fire current M17 and M33 .50 caliber ammunition. Units should be aware, however, that the newly developed XM903 and XM962 saboted light armor penetrator (SLAP) ammunition performs poorly when fired from an unlined barrel.

A visual check can be used to identify barrels with and without liners: Hold the barrel to a light source and look inside. In a lined barrel, you will see a gap in the lining eight to ten inches from the breach end. This gap allows for expansion between the lining and the parent metal of the barrel. In an unlined barrel, you will see no such gap.

The U.S. Army Infantry Center (USAIC) and the Armament and Chemical Acquisition and Logistics Agency (ACALA) recommend that unlined barrels be used during training only. Lined barrels should be used for weapons qualification and during conflicts.

The points of contact are CPT John Hodge, at USAIC, DSN 835-5013, commercial (706) 545-5013; and Mr. Bill Jensen, at ACALA, DSN 793-3677, commercial (309) 782-3677.

